IN THE UNITED STATES DISTRICT COURT FOR THE SOUTHERN DISTRICT OF TEXAS

)
UNITED STATES OF AMERICA,	· j
STATE OF ILLINOIS,)
STATE OF LOUISIANA,)
STATE OF NEW JERSEY,)
COMMONWEALTH OF PENNSYLVANIA,)
NORTHWEST CLEAN AIR AGENCY,	
)CIVIL ACTION NO. H-05-258
Plaintiffs,)) JUDGE SIM LAKE
,)
V.)
)
CONOCOPHILLIPS COMPANY,	
Defendant.	
)

FIRST AMENDMENT TO CONSENT DECREE

WHEREAS, on January 27, 2005, Plaintiffs, the United States of America ("United States"), on behalf of the Environmental Protection Agency ("EPA"), Co-Plaintiff the State of Illinois ("Illinois"), on behalf of the Illinois Environmental Protection Agency ("IEPA"), Co-Plaintiff the State of Louisiana ("Louisiana"), on behalf of the Louisiana Department of Environmental Quality ("LDEQ"), Co-Plaintiff the State of New Jersey ("New Jersey"), at the request and on behalf of the New Jersey Department of Environmental Protection ("NJDEP"), Co-Plaintiff the Commonwealth of Pennsylvania ("Pennsylvania"), on behalf of the Pennsylvania Department of Environmental Protection ("PaDEP"), and Co-Plaintiff the Northwest Clean Air Agency ("NWCAA") (collectively

"Plaintiffs") filed a complaint in this action against and simultaneously lodged a consent decree with ConocoPhillips Company ("COPC");

WHEREAS, on December 5, 2005, this Court entered the consent decree (the "December 2005 Consent Decree" or "Decree") that fully resolved the claims in the complaint;

WHEREAS, Plaintiffs and COPC ("the Parties") have agreed upon certain modifications of the December 2005 Consent Decree pursuant to Paragraph 437 of the Decree,

WHEREAS, the Parties agree that these modifications are in the best interest of the public and that entry of this First Amendment without litigation is appropriate;

WHEREAS, the Parties recognize, and the Court by entering this First Amendment finds, that this First Amendment has been negotiated at arms length and in good faith and that this First Amendment is fair, reasonable, and in the public interest;

NOW THEREFORE, before the taking of any testimony, without adjudication of any issue of fact or law, and upon the consent and agreement of the Parties, it is hereby ORDERED, ADJUDGED, and DECREED as follows:

AMENDED AND RESTATED SECTIONS

The December 2005 Consent Decree shall remain in full force and effect in accordance with its terms, except that the existing Paragraphs numbered 11.QQQ, 42, 54, 62-65, 67, 73, 77, 79(a), 83, 86, 87, 90, 111, 123, 124, 128, 129, 152, 167, 172, 175, 203, 206, 210, 211(a) and (b), 214, 215, 219, 229, 234, 235, 270, 271, 272, 279, 395 and 433 as well as Appendices A and B, are amended and restated as set forth below, and new Paragraphs numbered 48A, 67A, 100A, 122A, 123A, 279A, 279B, and 279C are added, all as follows:

* * * *

(Paragraph 11)

QQQ. "Santa Maria Refinery" shall mean the refinery owned and operated by COPC in Arroyo Grande, California.

* * * *

42. <u>Hydrotreating at the Sweeny Refinery</u>. By no later than June 1, 2006, COPC will have completed modifications to the operations of its Sweeny Refinery such that the feed to Sweeny FCCUs 3 and 27 is high-pressured hydrotreated at greater than 1200 pounds per square inch. By no later than June 1, 2006, COPC will high-pressure hydrotreat 100% of the feed at Sweeny FCCU 3 until both the NO_x and SO₂ emission limits have been established pursuant to Paragraphs 50 - 51 (NO_x) and Paragraphs 69 - 70 (SO₂). By no later than January 1, 2007, COPC will high-pressure hydrotreat 90% of the feed at Sweeny FCCU 27 until the SO₂ emissions limits have been established pursuant to Paragraphs 69 - 70.

* * * *

48A. At any time during the NOx Reducing Catalyst Additive Demonstration Period for the LAR Wilmington, Sweeny 3, Borger 29 (if applicable), and Borger 40 (if applicable), COPC may propose for EPA approval to end the Demonstration Period early and propose a short-term (e.g. 3-hour, 24-hour, or 7-day rolling average) and a long-term (365-day rolling average) concentration based limit (ppmvd), each at 0% oxygen, for NOx emissions from an FCCU. COPC may also propose alternative limits to be applicable during Hydrotreater Outages or other alternate operating scenarios.

If EPA approves the proposed limits, then COPC shall immediately begin complying with the proposed limits and the NOx Reducing Catalyst Additive Demonstration Period shall end and the requirements of Paragraphs 41-47 shall no longer apply for that FCCU. Unless and until EPA approves the proposed limits, COPC shall continue to use low-NOx promoter (if applicable), and continue to add NOx additive at the optimized rate for the remainder of the demonstration period, and Paragraphs 41-47 shall remain in effect.

* * * *

54. <u>Demonstrating Compliance with FCCU NOx Emission Limits</u>. Beginning no later than the dates set forth below for each of the following FCCUs, COPC will use NOx and O₂ CEMS to monitor performance of the FCCU.

<u>FCCU</u>	<u>CEMS</u>
Alliance	7/31/06
Bayway	DOL
Borger 29	9/30/05
Borger 40	9/30/05
Ferndale	DOL
LAR Wilmington	DOL
Sweeny 3	6/30/05
Sweeny 27	DOL
Trainer	12/31/06
Wood River 1	DOL
Wood River 2	DOL

The CEMS will be used to demonstrate compliance with the respective NOx emission limits established pursuant to this Section V.A. of this Consent Decree. COPC will make CEMS data available to EPA and the Applicable Co-Plaintiff upon demand as soon as practicable. COPC will install, certify, calibrate, maintain, and operate all CEMS required by this Paragraph in accordance with the provisions of 40 C.F.R. § 60.13 that are applicable to CEMS (excluding those provisions applicable only to Continuous Opacity Monitoring Systems) and Part 60 Appendices A and F, and the applicable performance specification test of 40 C.F.R. Part 60 Appendix B. For the Alliance, Borger, Sweeny, and LAR Wilmington FCCUs, unless Appendix F is otherwise required by the NSPS, state law or regulation, or a permit or approval, in lieu of the requirements of 40 C.F.R. Part 60, Appendix F §§ 5.1.1, 5.1.3 and 5.1.4, COPC must conduct either a Relative Accuracy Audit ("RAA") or a Relative Accuracy Test Audit ("RATA") on each CEMS at least once every three (3) years. COPC must also conduct Cylinder Gas Audits ("CGA") each calendar quarter during which a RAAA or a RATA is not performed.

* * * *

62. <u>SO₂ Baseline Data and SO₂ Model</u>. By the dates set forth below, for the following baseline time periods, for the following FCCUs, COPC will submit to EPA and the Applicable Co-Plaintiff two reports: (1) a report of twelve (12) months of baseline data and (2) a report describing a model to predict uncontrolled SO₂ concentration and mass emission rate:

FCCU	Baseline Start	Baseline End	Report
LAR Wilmington	12/31/05	12/31/06	2/28/07
Sweeny 3	6/30/06	6/30/07	8/31/07
Sweeny 27	6/30/06	12/31/06	2/28/07

The baseline data will include all data considered in development of the model on a daily average basis, and, at a minimum, the data required in Paragraph 43. Upon request by EPA, COPC will submit any additional data that EPA determines it needs to evaluate the model. The report describing the model will include a description of how the model was developed including which parameters were considered, why parameters were eliminated, efforts and results of model validation, and the statistical methods used to arrive at the equation to predict uncontrolled SO₂ concentration and mass emission rate.

63. SO₂ Reducing Catalyst Additives – Short Term Trials

- (a) By no later than the dates set forth in the table in Paragraph 63(c), COPC will identify for EPA approval at least two commercially available brands of SO₂ Reducing Catalyst Additives, for each FCCU, that COPC proposes to use for short term trials and submit a protocol to EPA for conducting the trials.
- (b) COPC will propose use of at least two brands of SO₂ Reducing Catalyst Additives that are likely to perform the best in each FCCU. EPA will base its approval or disapproval on its assessment of the performance of the proposed brands of additives in other FCCUs, the similarity of those FCCUs to COPC's FCCUs, as well as any other relevant factors, with the objective of conducting trials of the brands of SO₂ Reducing Catalyst Additives likely to have the best performance in reducing SO₂ emissions. In the event that COPC submits less than two approvable brands of additives, EPA will identify other approved additives brands to COPC.
- (c) If EPA has approved two brands of SO₂ Reducing Catalyst Additives by no later than the "trial start" date set forth below, then COPC will commence and complete the trials of those two brands and will submit a report to EPA that describes the performance of each brand that was trialed by the following dates for each of the following FCCUs:

FCCU	COPC IDs 2 Additives and submits Protocol	Trial Starts	Trial Ends	Report Date
LAR Wilmington	9/30/07	3/31/08	9/30/08	11/30/08
Sweeny 3	9/30/08	3/31/09	9/30/09	11/30/09
Sweeny 27	8/31/06	12/31/06	6/30/07	8/31/07

If EPA has not approved two brands of additives by the "trial start" date, then subsequent deadlines will be modified as agreed by the parties.

(d) In the report on the short-term trials, COPC will propose to use the best performing brand of additive as measured by percentage of SO₂ emissions reduced and the concentration to which SO₂ emissions were reduced in the trials, taking into account all relevant factors. EPA will either approve the proposed brand of additive or approve another brand of additive that was trialed for use in the optimization study. In approving an additive, EPA will consider the impact of the additive on the processing rate and/or the conversion capability if such impacts cannot be reasonably compensated for by adjusting operating parameters. Upon request by EPA, COPC will submit any additional available data that EPA determines it needs to evaluate the trials.

64. SO₂ Reducing Catalyst Additives - Optimization Study and Report

- (a) By no later than the dates set forth in the table in Paragraph 64(c) ("Paragraph 64(c) Table"), COPC will submit, for EPA approval, a proposed protocol consistent with the requirements of Appendix D for optimization studies to establish the optimized SO₂ Reducing Catalyst Additive addition rates. The protocol will include methods to calculate effectiveness, methods for baseloading, and percent additive used at each increment tested.
- (b) If EPA has approved a brand of SO₂ Reducing Catalyst Additive by no later than the "Optimization Start" date set forth in the Paragraph 64(c) Table, then COPC will commence and complete the optimization study of the SO₂ Reducing Catalyst Additive in accordance with the approved protocol and Appendix D by no later than the dates set forth in the Paragraph 64(c) Table. If EPA has not approved a brand of SO₂ Reducing Catalyst Additive by no later than the "Optimization Start" date, then subsequent deadlines will be modified as agreed by the parties.
- (c) By no later than the following dates, COPC will report the results of the SO₂ Reducing Catalyst Additive Optimization Study and propose, for EPA approval, optimized addition rates of all catalysts to be used for the demonstration period.

FCCU	Protocol Due	Optimization Start	Optimization End	Report Due
LAR Wilmington	6/30/08	12/31/08	6/30/09	7/31/09
Sweeny 3	6/30/09	12/31/09	6/30/10	7/31/10
Sweeny 27	3/31/07	9/30/07	3/31/08	4/30/08

Upon request by EPA, COPC will submit any additional data that EPA determines it needs to evaluate the SO₂ Reducing Catalyst Additive Optimization Study.

- (d) During the Optimization Study, COPC will successively add SO₂ Reducing Catalyst at increments of 5.0, 6.7, 8.4, and 10.0 Weight % SO₂ Reducing Catalyst Additive. Once a steady state has been achieved at each increment, COPC will evaluate the performance of the SO₂ Reducing Catalyst Additive in terms of SO₂ emissions reductions. The final Optimized SO₂ Reducing Catalyst Additive Addition Rate, in pounds per day, will occur at the addition rate where either:
 - (i) The FCCU meets 25 ppmvd SO₂ at 0% O₂ on a 365-day rolling average, in which case COPC will agree to accept a limit of 25 ppmvd SO₂ at 0% O₂ on a 365-day rolling average basis at the conclusion of the demonstration period;
 - (ii) Incremental Pickup Factor <2.0 lb SO₂/lb additive; or
 - (iii) FCCU is operating at 10.0% Weight % SO₂ Reducing Catalyst Additive.

If an additive limits the processing rate or the conversion capability in a manner that cannot be reasonably compensated for by adjustment of other parameters, then the additive level will be reduced to a level at which the additive no longer causes such effects.

65. SO₂ Reducing Catalyst Additives – Demonstration Period and Report

- (a) By no later than dates set forth in the table in Paragraph 65(b), COPC will commence and complete a demonstration of the EPA-approved SO₂ Reducing Catalyst Additive at the optimized addition rates that COPC proposes unless EPA proposes different optimized addition rates. Delays by EPA in approving the optimized addition rate may result in extensions of the demonstration period and extensions of relevant deadlines as agreed by the parties.
- (b) By no later than the following dates, COPC will report to EPA and the Applicable Co-Plaintiff the results of the demonstrations ("SO₂ Additive Demonstration Report"). The SO₂ Additive Demonstration Report will include, at a minimum, the SO₂ and oxygen CEMS data recorded during the demonstration period and all baseline data on a daily average basis for the demonstration period.

FCCU	Demonstration Start	Demonstration End	Report Due
LAR Wilmington	6/30/09	12/31/10	3/1/11
Sweeny 3	6/30/10	12/31/11	3/1/12
Sweeny 27	3/31/08	9/30/09	11/30/09

- (c) During the demonstration period, COPC will both physically add SO₂ Reducing Catalyst Additive and operate each FCCU, CO Boiler (where applicable) and FCCU feed hydrotreaters (where applicable) in a manner that minimizes SO₂ emissions to the extent practicable without interfering with conversion or processing rates.
- 67. COPC may notify EPA at any time prior to the following dates of COPC's agreement to comply with SO₂ emission limits of 25 ppmvd on a 365-day rolling average basis and 50 ppmvd on a 7-day rolling average basis, at 0% oxygen, effective on the following dates:

FCCU	<u>Date</u>
LAR Wilmington	3/1/11
Sweeny 3	3/1/12
Sweeny 27	11/30/09

If COPC makes such a notification, Paragraphs 61 - 66 will no longer apply for the affected FCCU(s) after the date of the notification.

* * * *

67A. At any time during the SO₂ Reducing Catalyst Additive Demonstration Period for the LAR Wilmington, Sweeny 3, and Sweeny 27, COPC may propose for EPA approval to end the Demonstration Period early and propose a short-term (7-day rolling average) and a long-term (365-

day rolling average) concentration based limit (ppmvd), each at 0% oxygen, for SO₂ emissions from an FCCU. COPC may also propose alternative limits to be applicable during Hydrotreater Outages or other alternate operating scenarios. If EPA approves the proposed limits, then COPC shall immediately begin complying with the proposed limits and the SO₂ Reducing Catalyst Additive Demonstration Period shall end and the requirements of Paragraphs 61-66 shall no longer apply for that FCCU. Unless and until EPA approves the proposed limits, COPC shall continue to add SO₂ reducing additive at the optimized rate for the remainder of the demonstration period, and Paragraphs 61-66 shall remain in effect.

* * * *

73. <u>Demonstrating Compliance with FCCU SO₂ Emission Limits</u>. Beginning no later than the dates set forth below for each of the following FCCUs, COPC will use SO₂ and O₂ CEMS to monitor performance of the FCCU.

FCCU	<u>CEMS</u>
Alliance	7/31/06
Bayway	DOL
Borger 29	9/30/05
Borger 40	9/30/05
Ferndale	DOL
LAR Wilmington	DOL
Sweeny 3	6/30/05
Sweeny 27	DOL

Trainer

12/31/06

Wood River 1

DOL

Wood River 2

DOL

The CEMS will be used to demonstrate compliance with the respective SO₂ emission limits established pursuant to Section V.B. of this Consent Decree. COPC will make CEMS data available to EPA and the Applicable Co-Plaintiff upon demand as soon as practicable. COPC will install, certify, calibrate, maintain, and operate all CEMS required by this Paragraph in accordance with the provisions of 40 C.F.R. § 60.13 that are applicable to CEMS (excluding those provisions applicable only to Continuous Opacity Monitoring Systems) and Part 60 Appendices A and F, and the applicable performance specification test of 40 C.F.R. Part 60 Appendix B. For the Alliance, Borger, Sweeny, and LAR Wilmington FCCUs, unless Appendix F is otherwise required by the NSPS, state law or regulation, or a permit or approval, in lieu of the requirements of 40 C.F.R. Part 60, Appendix F §§ 5.1.1, 5.1.3 and 5.1.4, COPC must conduct either a Relative Accuracy Audit ("RAA") or a Relative Accuracy Test Audit ("RATA") on each CEMS at least once every three (3) years. COPC must also conduct Cylinder Gas Audits ("CGA") each calendar quarter during which a RAA or a RATA is not performed.

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77. PM Emission Limits for the Bayway, Borger 29, Borger 40, Trainer, Sweeny 3, Wood
River 1 and Wood River 2 FCCUs. COPC will continue to operate the wet gas scrubber at the
Bayway Refinery and will design the wet gas scrubbers at the Borger 29, Borger 40, Trainer, Wood
River 1 and Wood River 2 FCCUs to achieve an emission limit of 0.5 pound PM per 1000 pounds of

coke burned on a 3-hour average basis. To the extent that, under Paragraph 58 of this Consent Decree, COPC does not install wet gas scrubbers at Borger FCCUs 29 and 40, this requirement will not apply. COPC will design and install a new electrostatic precipitator at Sweeny 3 to achieve an emission limit of 0.5 pound PM per 1000 pounds of coke burned on a 3-hour average basis. By no later than the following dates for the following FCCUs, COPC will comply with an emission limit of 0.5 pound PM per 1000 pounds of coke burned on a 3-hour average basis determined by the testing protocol in Paragraph 83:

Bayway	Date of Lodging
Borger 29 (if applicable)	December 31, 2006
Borger 40 (if applicable)	December 31, 2015
Sweeny 3	December 31, 2009
Trainer	December 31, 2006
Wood River 1	December 31, 2008
Wood River 2	December 31, 2012

79. PM Control Measures and Emission Limits at the Ferndale FCCU

(a) By no later than April 1, 2007, COPC will complete modifications to the existing wet gas scrubber at the Ferndale FCCU to comply with an emission limit of no greater than 0.50 pounds PM per 1000 pounds of coke burned on a 3-hour average basis. By no later than June 30, 2007, COPC will comply with an emission limit of 0.50 pound PM per 1000 pounds of coke burned on a

3-hour average basis at the Ferndale FCCU. By no later than June 30, 2007, COPC will conduct a performance test to demonstrate compliance with the emission limit of 0.50 pounds PM per 1000 pounds of coke burned on a 3-hour average basis by using 40 C.F.R. Part 60 Appendix A Method 5B.

* * * *

83. Demonstrating Compliance with PM Emission Limits Set Forth in Section V.C and V.E. COPC will follow the test methods specified in 40 C.F.R. § 60.106(b)(2) to measure PM emissions from the FCCUs, except at the Bayway FCCU where COPC will follow NJAC 7:27B-1. COPC will propose and submit the test methods to EPA for approval, with a copy to the Applicable Co-Plaintiff, by no later than three (3) months after the PM limit becomes effective at an FCCU. COPC will conduct the first test no later than six (6) months after the PM limit becomes effective at an FCCU. COPC will conduct annual stack tests thereafter by December 31 of each calendar year at each FCCU and will submit the results of each test in the first report due under Section IX that is at least three (3) months after the test. Except with respect to the Bayway FCCU, upon demonstrating through at least three (3) annual tests that the PM limits are not being exceeded at a particular FCCU, COPC may request EPA approval to conduct tests less frequently than annually at that FCCU.

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86. <u>Demonstrating Compliance with CO Emission Limits</u>. Beginning no later than the dates set forth below for each FCCU, COPC will use CO and O₂ CEMS to monitor performance of the FCCU:

FCCU	<u>CEMS</u>
Alliance	7/31/06
Bayway	DOL
Borger 29	9/30/05
Borger 40	9/30/05
Ferndale	DOL
LAR Wilmington	4/11/05
Sweeny 3	4/11/05
Sweeny 27	DOL
Trainer	12/31/06
Wood River 1	4/11/05
Wood River 2	4/11/05

The CEMS will be used to demonstrate compliance with the respective CO emission limits established pursuant to this Section V.D. COPC will make CEMS data available to EPA and the Applicable Co-Plaintiff upon demand as soon as practicable. COPC will install, certify, calibrate, maintain, and operate all CEMS required by this Paragraph in accordance with the provisions of 40 C.F.R. § 60.13 that are applicable to CEMS (excluding those provisions applicable only to Continuous Opacity Monitoring Systems) and Part 60 Appendices A and F, and the applicable performance specification test of 40 C.F.R. Part 60 Appendix B. For the Alliance, Borger, Sweeny, and LAR Wilmington FCCUs, unless Appendix F is otherwise required by the NSPS, state law or regulation, or a permit or approval, in lieu of the requirements of 40 C.F.R. Part 60, Appendix F §§ 5.1.1, 5.1.3 and 5.1.4, COPC must conduct either a Relative Accuracy Audit ("RAA") or a Relative Accuracy Test Audit ("RATA") on each CEMS at least once every three (3) years. COPC must also

conduct Cylinder Gas Audits ("CGA") each calendar quarter during which a RAA or a RATA is not performed.

87. The following FCCU catalyst regenerators will be "affected facilities," as that term is used in the Standards of Performance for New Stationary Sources ("NSPS"), 40 C.F.R. Part 60, and will be subject to and comply with the requirements of NSPS Subparts A and J for each of the following pollutants by the following dates:

	<u>SO₂</u>	<u>PM</u>	CO
Alliance	12/31/09	DOL	9/30/05
Bayway	DOL	DOL	DOL
Borger 29	12/31/06 (but see ¶ 88)	12/31/06	DOL
Borger 40	12/31/15 (but see ¶ 88)	4/11/05	DOL
Ferndale	DOL	DOL	DOL
LAR Wilmington	6/1/05	4/11/05	4/11/05
Sweeny 3	6/30/06	12/31/09	4/11/05
Sweeny 27	6/30/06	4/11/06	DOL
Trainer	12/31/06	12/31/06	12/31/06
Wood River 1	12/31/08	DOL	4/11/05
Wood River 2	12/31/12	DOL	4/11/05

90. Opacity Monitoring at the FCCUs. By no later than the following dates, COPC will install and operate a Continuous Opacity Monitoring System ("COMS") to monitor opacity at each of the following FCCUs:

Alliance	7/31/06
Bayway	12/31/05
Borger 29	DOL
Borger 40	DOL
Ferndale	4/1/07
LAR Wilmington	4/11/05
Sweeny 3	DOL
Sweeny 27	DOL
Trainer	12/31/06
Wood River 1	DOL
Wood River 2	DOL

COPC will install, certify, calibrate, maintain, and operate all COMS required by this Consent Decree in accordance with 40 C.F.R §§ 60.11, 60.13 and Part 60 Appendix A, and the applicable performance specification test of 40 C.F.R. Part 60 Appendix B.

100A. Combustion Units for which controls were installed at the Alliance Refinery prior to September 1, 2005, in order to meet Paragraph 95, shall meet the monitoring requirements of Paragraph 100 beginning no later than December 31, 2006.

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of Lodging for all heaters and boilers at the Alliance Refinery. By no later than the Date of Lodging for all heaters and boilers at the Alliance Refinery except for heater 191-H-1, and by no later than December 31, 2008, for heater 191-H-1, the heaters and boilers at the Alliance Refinery will be affected facilities, as that term is used in the NSPS, 40 C.F.R. Part 60, and will be subject to and comply with the requirements of NSPS Subparts A and J for fuel gas combustion devices.

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122A. Compliance with the National Emission Standards for Hazardous Air Pollutants for Sulfur Recovery Plants during Scheduled Turnarounds of the TGUs at the Alliance, Bayway, Santa Maria, and Wood River Refineries. Up to and including December 31, 2013, COPC will not be in violation of the sulfur recovery plant provisions of 40 C.F.R. Part 63, Subpart UUU, for the sulfur recovery plants at the Alliance, Bayway, Santa Maria, and Wood River Refineries during Scheduled Turnarounds of the associated TGUs if, during each such Scheduled Turnaround, COPC complies with the requirements of both Paragraph 134 of this Consent Decree and the requirements associated with Option 2 of Subpart UUU, found at 40 C.F.R. § 63.1568. If COPC has not had an opportunity to conduct performance tests and establish operating limits required for Option 2 of Subpart UUU

during a Scheduled Turnaround at any of these SRPs, COPC is entitled to perform that test and establish such operating limits at the first Scheduled TGU Turnaround and COPC will not be in violation of any applicable sulfur recovery plant provision of Subpart UUU based on the timing of the first performance test. This Paragraph 122A applies only during Scheduled Turnarounds of the TGUs at the Alliance, Bayway, Santa Maria, and Wood River Refineries. During all other times, COPC will comply with Option 1 of Subpart UUU, found at 40 C.F.R. § 63.1568(a)(1)(i).

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123. Elimination, Control, and/or Inclusion in Monitoring of Sulfur Pit Emissions. By no later than the following dates for the Covered SRPs, COPC will either eliminate, control, and/or include and monitor as part of a Covered SRP's emissions under 40 C.F.R. § 60.104(a)(2), all sulfur pit emissions. The LAR Wilmington Plant and the Rodeo Refinery will upgrade existing systems to meet this requirement. "Control" for purposes of this Paragraph includes routing sulfur pit emissions into a contactor box of a Beavon Stretford TGU evaporator. For purposes of this Paragraph, the pelletizer at the Santa Maria Refinery and the acid plant at the LAR Wilmington Plant are not "Covered SRPs." Routing emissions to a contactor box on a Beavon Stretford TGU evaporator is a work practice standard. Monitoring for this standard will be recordkeeping sufficient to show that the means of conveyance of the gases to the contactor box (for example, blowers, eductors, etc.) are operational. The Parties recognize that periodic maintenance may be required for a properly designed and operated system of conveyance of the gases to the contactor box. COPC will take all reasonable measures to minimize emissions while such periodic maintenance is being performed.

SRP

Compliance Date

Alliance SRP

The earlier of (i) the first SRP turnaround after 4/1/06; or

(ii) 12/31/08

Bayway SRP

Date of Lodging

Borger SRP

6/30/06

Ferndale SRP

Date of Lodging

LAR Carson SRP

Date of Lodging

LAR Wilmington SRP

6/30/07

Rodeo SRP

6/30/06

Santa Maria SRP

The earlier of (i) the first SRP turnaround after 12/31/05; or

(ii) 12/31/08-

Sweeny SRP

Date of Lodging

Trainer SRP

6/30/06

Wood River SRP

Date of Lodging

123A. The Rodeo Refinery has upgraded its existing system consistent with the requirements of Paragraph 123. COPC will install enhancements to this control system at the Rodeo Refinery by no later December 31, 2008.

* * * *

124. <u>Monitoring all Emissions Points and Installing CEMS</u>. By no later than the following dates for the Covered SRPs, COPC will monitor all tail gas emission points (stacks) to the atmosphere from the respective SRP and will install and operate a CEMS in accordance with NSPS Subpart J, except where COPC timely submits an AMP:

SRP

Date

Alliance SRP

7/31/06

Bayway SRP

4/11/05

Borger SRP

Date of Lodging

Ferndale SRP

Date of Lodging

LAR Carson SRP

Date of Lodging

LAR Wilmington SRP

4/11/05

Rodeo SRP

4/11/05

Santa Maria SRP

4/11/05

Sweeny SRP

Date of Lodging

Trainer SRP

4/11/05

Wood River SRP

Date of Lodging

COPC must monitor all emissions from the Tail Gas Units associated with these SRPs through the use of an NSPS-compliant CEMS, but COPC may submit an AMP, by no later than March 31, 2005, for any CEMS that, as of the Date of Lodging, has lower span values than NSPS specifications. To the extent that COPC seeks an AMP to monitor any other tail gas emission point to the atmosphere, COPC will submit complete AMPs for all such points by no later than March 31, 2005. If EPA does not approve an AMP, COPC will install and operate a CEMS at the respective emission point in accordance with NSPS Subpart J by no later than eighteen (18) months after receipt of EPA's disapproval.

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128. <u>SRP Optimization Study Report and Implementation</u>. By no later than the following dates for the following SRPs, COPC will submit to EPA and the Applicable Co-Plaintiff a report (the "SRP Optimization Study Report") on the results and recommendations of optimization studies of the Claus trains for the Alliance, Bayway, Santa Maria, and Wood River SRPs:

Bayway SRP

June 30, 2005

Wood River SRP

December 31, 2005

Santa Maria SRP

June 30, 2006

Alliance SRP

March 31, 2007

The SRP Optimization Study Report will include a schedule for implementing the Report's recommendations, if any, to enhance SRP performance. COPC will implement the physical changes, if any, and operating parameters, if any, recommended in the SRP Optimization Study Report according to the schedule set forth therein. COPC will not be required to make any physical changes that would restrict or adversely affect the operation of the Alliance, Bayway, Santa Maria, and Wood River SRPs under normal operating conditions. COPC will incorporate the results of the optimization studies into the Preventive Maintenance and Operation Plans required under Paragraph 125.

* * * *

- 129. <u>Performance Standards after Optimization Studies for the Alliance, Bayway, Santa Maria, and Wood River SRPs.</u>
- (a) Periods of Applicability of Performance Standards for the Alliance, Bayway, Santa Maria, and Wood River SRPs. For the Alliance, Bayway, Santa Maria, and Wood River SRPs, COPC will comply with the performance standards established pursuant to Subparagraphs 129(b) (d) during all periods of Scheduled Turnarounds of the associated TGUs.
- (b) <u>Proposing Performance Standards</u>. In the Optimization Study Reports for the Alliance, Bayway, Santa Maria, and Wood River SRPs, COPC will propose a performance standard (percent recovery rate range or other performance standard) for each Claus train based upon expected SRP performance during a Scheduled Turnaround of the SRP. The reports will also include, if necessary, a schedule for implementing related optimization study recommendations that are necessary to comply with COPC's proposed standard. Unless and until notified by EPA pursuant to Subparagraph 129(c) below, COPC will comply with its proposed performance standard during the periods identified in Subparagraph 129(a) above.
- (c) If EPA does not provide a response to COPC's proposed performance standard by the following dates, then COPC will utilize the performance standard that it proposes:

Bayway SRP September 30, 2005 Wood River SRP June 30, 2006 Santa Maria SRP December 31, 2006 Alliance SRP September 30, 2007

If, by the dates set forth above, EPA determines that a more stringent performance standard and/or a different implementation schedule than those proposed by COPC is appropriate and can be achieved with a reasonable certainty of compliance, EPA will so notify COPC. Unless, within ninety (90) days of its receipt of that notice, COPC disputes EPA's determination(s), COPC will comply with such

new standard during the periods identified in Subparagraph 129(a) above and/or with the new schedule as set forth in EPA's response.

(d) During the first Scheduled Turnaround of the Alliance, Bayway, Santa Maria, and Wood River TGUs after December 31, 2005, COPC will evaluate the actual performance of the Claus trains at the optimized levels and, based on that evaluation, may propose to modify the performance standard established under Subparagraph (b) or (c). COPC will propose a more stringent standard if actual experience demonstrates a reasonably certainty of compliance with a more stringent standard. COPC will comply with any revised performance standard that it proposes under this Subparagraph under the same conditions set forth in Subparagraph (c), except that EPA's response date will be no later than six (6) months after COPC proposes a new performance standard.

* * * *

152. Future Acid Gas Flaring and Tail Gas Incidents: General. COPC agrees to implement a program to investigate the cause of future Acid Gas Flaring and Tail Gas Incidents, to take reasonable steps to correct the conditions that cause or contribute to such Acid Gas Flaring and Tail Gas Incidents, and to minimize Acid Gas Flaring and Tail Gas Incidents. All Covered Refineries other than the Alliance Refinery will follow the procedures in this Section V.L to evaluate whether future Acid Gas Flaring and Tail Gas Incidents occurring after the Date of Entry of this Decree are due to Malfunctions or are subject to stipulated penalties. The Alliance Refinery will follow the procedures in this Section V.L to evaluate whether future Acid Gas Flaring and Tail Gas Incidents occurring after June 30, 2006, are due to Malfunctions or are subject to stipulated penalties. The procedures set forth in Section V.L require a Root Cause Analysis ("RCA") and corrective action for all types of

Acid Gas Flaring and Tail Gas Incidents. The procedures require stipulated penalties for Acid Gas Flaring and Tail Gas Incidents if the Root Causes are not due to Malfunctions.

* * * *

167. At all Covered Refineries other than the Alliance Refinery, for Hydrocarbon Flaring Incidents occurring after the Date of Entry and at the Alliance Refinery beginning June 30, 2006, COPC will follow the same investigative, reporting, and corrective action procedures as those outlined in Paragraphs 153 - 157 for Acid Gas Flaring and Tail Gas Incidents. However:

- (a) Hydrocarbon Flaring Incidents will be reported in a Covered Refinery's quarterly/semi-annual reports due under Section IX rather than on an incident-by-incident basis;
- (b) For each of the Flaring Devices identified in Appendix A, COPC may prepare and submit a single RCA for one or more Root Causes found by that analysis to routinely recur. COPC will inform EPA and the Applicable Co-Plaintiff that it is electing to report only once on that Root Cause(s). Unless EPA or the Applicable Co-Plaintiff objects within thirty (30) days of receipt of the RCA, such election will be effective;
- (c) For the six (6) month period after the installation of a flare gas recovery system (that is, during the time in which the flare gas recovery system is being commissioned), COPC will not be required to undertake Hydrocarbon Flaring Incident investigations if the root cause of the Hydrocarbon Flaring Incident is directly related to the commissioning of the flare gas recovery system;
- (d) In lieu of analyzing possible corrective actions under Paragraph 153 and taking interim and/or long-term corrective action under Paragraph 154 for a Hydrocarbon Flaring Incident attributable to the startup or shutdown of an Upstream Process Unit that COPC has previously analyzed under this Paragraph 167, COPC may identify such prior analysis when submitting the report required under this Paragraph 167.
- (e) To the extent that a Hydrocarbon Flaring Incident at a Covered Refinery has as its Root Cause the bypass of a flare gas recovery system for safety or maintenance reasons as set forth in Paragraphs 148 149, COPC will be required to describe only the HC Flaring Incident and to list the date, time, and duration of such Incident in the quarterly/semi-annual reports due under Section IX.

172. <u>Current Compliance Status</u>. COPC will comply with the following compliance options:

- (a) On the Date of Lodging, COPC's Bayway and Trainer Refineries will comply with the compliance option set forth at 40 C.F.R. § 61.342(c) and (c)(3)(ii) (hereinafter referred to as the "2 Mg compliance option");
- (b) On the Date of Lodging, COPC's Ferndale Refinery will comply with the 2 Mg compliance option, with the exception of the work required under Paragraph 174;
- (c) On the Date of Lodging, COPC's Alliance, Borger, LAR Wilmington, Sweeny, and Wood River (including Distilling West) Refineries will comply with the compliance option set forth at 40 C.F.R. § 61.342(e) (the "6 BQ compliance option");
- (d) By no later than January 31, 2005, COPC's LAR Carson Plant will comply with the 6 BQ compliance option;
- (e) On or before April 30, 2004, COPC reported that it had a Total Annual Benzene ("TAB") of less than 10 Mg/yr at its Rodeo and Santa Maria Refineries.
- (f) On May 26, 2006, in accordance with Paragraph 180, COPC proposed to implement a compliance strategy and schedule to ensure that the Rodeo Refinery complies with the 6 BQ option by no later than April 7, 2007.

175. One-Time Review and Verification of Each Covered Refinery's TAB: Phase One of the Review and Verification Process. By no later than September 30, 2005, for the Bayway, Borger, Ferndale, LAR Carson, Rodeo and Santa Maria Refineries, and by no later than March 31, 2006, for the LAR Wilmington, Sweeny, Trainer, and Wood River Refineries, and by no later than September 30, 2006, for the Alliance Refinery, COPC will complete a review and verification of each Covered Refinery's TAB and each Covered Refinery's compliance with the applicable compliance option. For each Covered Refinery, COPC's Phase One review and verification process will include, but not be limited to:

- an identification of each waste stream that is required to be included in the Covered Refinery's TAB (e.g., slop oil, tank water draws, spent caustic, desalter rag layer dumps, desalter vessel process sampling points, other sample wastes, maintenance wastes, and turnaround wastes (that meet the definition of waste under Subpart FF));
- (b) a review and identification of the calculations and/or measurements used to determine the flows of each waste stream for the purpose of ensuring the accuracy of the annual waste quantity for each waste stream;
- (c) an identification of the benzene concentration in each waste stream, including sampling for benzene concentration at no less than 10 waste streams per Covered Refinery consistent with the requirements of 40 C.F.R. § 61.355(c)(1) and (3); provided however, that previous analytical data or documented knowledge of waste streams may be used in accordance with 40 C.F.R. § 61.355(c)(2), for streams not sampled; and
- (d) an identification of whether or not the stream is controlled consistent with the requirements of Subpart FF.

203. Training: All but the Santa Maria Refinery. By no later than June 30, 2005, for all Covered Refineries except Rodeo and Santa Maria, and by no later than December 31, 2006, for the Rodeo Refinery, COPC will complete the development of standard operating procedures for all control equipment used to comply with the Benzene Waste Operations NESHAP. By no later than March 31, 2006, for the Bayway, Borger, Ferndale, LAR Carson, LAR Wilmington, Sweeny, Trainer, and Wood River Refineries, and by no later than September 30, 2006, for the Alliance Refinery and by no later than April 1, 2007, for the Rodeo Refinery, COPC will complete an initial training program regarding these procedures for all operators assigned to this equipment. Comparable training will also be provided to any persons who subsequently become operators, prior to their assumption of this duty. Until termination of this Decree, "refresher" training in these procedures will be performed at a minimum on a three (3) year cycle.

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206. Waste/Slop/Off-Spec Oil Management: Schematics. By no later than September 30, 2005, for the Bayway, Borger, Ferndale, LAR Carson, Rodeo and Santa Maria Refineries, and by no later than March 31, 2006, for the LAR Wilmington, Sweeny, Trainer, and Wood River Refineries, and by no later than September 30, 2006, for the Alliance Refinery, COPC will submit to EPA and the Applicable Co-Plaintiff schematics for each Refinery that: (a) depict the waste management units (including sewers) that handle, store, and transfer waste, slop, or off-spec oil streams; (b) identify the control status of each waste management unit; and (c) show how such oil is transferred within the Refinery. COPC will include with the schematics a quantification of all uncontrolled waste, slop, or off-spec oil movements at the Refinery. If requested by EPA, COPC will submit to EPA within ninety (90) days of the request, revised schematics regarding the characterization of these waste, slop, off-spec oil streams and the appropriate control standards.

* * * *

210. <u>Benzene Waste Operations Sampling Plan: Due Dates for Submission</u>. COPC will submit the sampling plans by no later than the following dates for the following Refineries:

Bayway, Borger, Ferndale 12/31/05
LAR Carson, Rodeo, Santa Maria

LAR Wilmington, 6/30/06
Sweeny, Trainer, Wood River

Alliance 12/31/06

211. Benzene Waste Operations Sampling Plans: Content Requirements.

- (a) <u>Santa Maria (TABs of under 10 Mg/yr)</u>. The sampling plan for the Santa Maria Refinery will identify:
 - (i) all waste streams that contributed 0.05 Mg/yr or more to the previous year's TAB calculations; and
 - (ii) the proposed sampling locations and methods for flow calculations to be used in calculating projected quarterly and annual TAB calculations under the terms of Paragraph 214.

The sampling plan will require COPC to take, and have analyzed, in each calendar quarter, at least three representative samples from all waste streams identified in Subparagraph (a)(i) and all locations identified in Subparagraph (a)(ii).

- (b) Alliance, Borger, LAR Carson, LAR Wilmington, Rodeo, Sweeny, and Wood River (6)

 BQ Compliance Option). The sampling plans for the Alliance, Borger, LAR Carson, LAR

 Wilmington, Rodeo, Sweeny and Wood River Refineries will identify:
 - (i) all uncontrolled waste streams that count toward the 6 BQ calculation and contain greater than 0.05 Mg/yr of benzene; and
 - (ii) the proposed sampling locations and methods for flow calculations to be used in calculating projected quarterly and annual uncontrolled benzene quantity calculations under the terms of Paragraph 214.

The sampling plan will require COPC to take, and have analyzed, in each calendar quarter, at least three representative samples from all waste streams identified in Subparagraph (b)(i) and all locations identified in Subparagraph (b)(ii).

214. Quarterly and Annual Estimations of TABs and Uncontrolled Benzene Quantities. At the end of each calendar quarter and based on sampling results and approved flow calculations, COPC will calculate a quarterly and projected annual: (i) TAB for the Santa Maria Refinery; and (ii) uncontrolled benzene quantity for the remaining Covered Refineries. In making this calculation, COPC will use the average of the three samples collected at each sampling location. If these calculations do not identify any potential violations of the benzene waste operations NESHAP, COPC will submit these calculations in the reports due under Section IX of this Decree.

* * * *

- 215. <u>Corrective Measures: Basis</u>. Except as set forth in Paragraph 216, COPC will implement corrective measures at the applicable Covered Refinery if:
 - (a) For the Santa Maria Refinery, the quarterly TAB equals or exceeds 2.5 Mg or the projected annual TAB equals or exceeds 10 Mg for the then-current compliance year;
 - (b) For the Alliance, Borger, LAR Carson, LAR Wilmington, Rodeo, Sweeny, or Wood River Refineries, the quarterly uncontrolled benzene quantity equals or exceeds 1.5 Mg or the projected annual uncontrolled benzene quantity equals or exceeds 6 Mg for the then-current compliance year;
 - (c) For the Bayway, Ferndale, and Trainer Refineries, the quarterly uncontrolled benzene quantity equals or exceeds 0.5 Mg or the projected annual uncontrolled benzene quantity equals or exceeds 2 Mg for the then-current compliance year.

* * * *

- 219. <u>Miscellaneous Measures</u>. The provisions of this Paragraph will apply to all Covered Refineries except the Rodeo and Santa Maria Refineries from September 30, 2005, through termination, to the Rodeo Refinery from January 1, 2007, through termination, and to the Santa Maria Refinery, if its TAB reaches 10 Mg/yr, from such time as a compliance strategy under Paragraph 180 is implemented until termination of the Consent Decree:
 - (a) Conduct monthly visual inspections of all Subpart FF water traps within the Refinery's individual drain systems;
 - (b) Identify and mark all area drains that are segregated storm water drains;
 - (c) On a weekly basis, visually inspect all Subpart FF conservation vents on process sewers for detectable leaks; reset any vents where leaks are detected; and record the results of the inspections. After two (2) years of weekly inspections, and based upon an evaluation of the recorded results, COPC may submit a request to the Applicable EPA Region to modify the frequency of the inspections. EPA will not unreasonably withhold its consent. Nothing in this Paragraph 219(c) will require COPC to monitor conservation vents on fixed roof tanks. Alternatively, for conservation vents with indicators that identify whether flow has occurred, COPC may elect to visually inspect such indicators on a monthly basis and, if flow is then detected, COPC will then visually inspect that indicator on a weekly basis for four (4) weeks. If flow is detected during any two (2) of those four (4) weeks, COPC will install a carbon canister on that vent until appropriate corrective action(s) can be implemented to prevent such flow;
 - (d) Conduct quarterly monitoring of the controlled oil-water separators in benzene service in accordance with the "no detectable emissions" provision in 40 C.F.R. § 61.347; and
 - (e) Manage all groundwater remediation wastes that are covered by Subpart FF at each of its Refineries in appropriate waste management units under and as required by the Benzene Waste Operations NESHAP.

229. <u>Third-Party Audits</u>. COPC will retain a contractor(s) to perform a third-party audit of the Refinery's LDAR program at least once every four (4) years. The first third-party audit and report for the Bayway, Ferndale, and Sweeny Refineries will be completed no later than December 31,

2005; the first third-party audit and report for the Alliance, Borger, LAR Carson, Santa Maria, Trainer, and Wood River Refineries will be completed by no later than December 31, 2006; and the first third-party audit and report for the LAR Wilmington and Rodeo Refineries will be completed by no later than April 1, 2007.

* * * *

234. <u>Leak Definition for Valves</u>. By no later than March 1, 2005, for the LAR Carson, LAR Wilmington, Rodeo, and Sweeny Refineries, and by no later than June 30, 2006, for the Bayway, Borger, Ferndale, Santa Maria, Trainer, and Wood River Refineries, and by no later than September 30, 2006, for the Alliance Refinery, COPC will utilize an internal leak definition of no greater than 500 ppm VOCs for each Refinery's valves in light liquid and/or gas/vapor service, excluding pressure relief devices.

* * * *

235. <u>Leak Definition for Pumps</u>. By no later than the following dates for the following Refineries, COPC will utilize an internal leak definition of no greater than 2000 ppm for each Refinery's pumps in light liquid and/or gas/vapor service:

Bayway, LAR Carson, LAR Wilmington, Rodeo, and Sweeny March 1, 2005

Ferndale, Santa Maria, and Wood River

June 30, 2006

Alliance

September 30, 2006

Borger and Trainer

June 30, 2007

270. Project Relating to the Trainer Refinery. By no later than June 30, 2005, COPC will donate funds in the amount of Four-Hundred Thousand Dollars (\$400,000) to the Delaware County, Pennsylvania, Local Emergency Planning Committee ("LEPC"). The LEPC will expend these funds by no later than December 31, 2007. The funds will be used to develop a local emergency notification system and may include: (i) establishing an AM or FM radio frequency for emergency broadcasts; (ii) implementing a telephone-based emergency notification system; (iii) installing a siren warning system; and (iv) developing training and educational materials to inform the public about the emergency notification system.

* * * *

271. Project Relating to the Alliance Refinery. COPC will donate funds in the total amount of Four-Hundred Thousand Dollars (\$400,000) to the LDEQ to support the collection and recycling or disposal of household hazardous waste materials at selected locations throughout the State of Louisiana and other LDEQ public awareness programs. COPC will donate Two-Hundred Thousand Dollars (\$200,000) by no later than June 30, 2005; One-Hundred Thousand Dollars (\$100,000) by no later than June 30, 2006; and One-Hundred Thousand Dollars (\$100,000) by no later than June 30, 2007.

* * * *

272. Projects Relating to the Ferndale Refinery.

- (a) By no later than June 30, 2005, COPC will purchase a new fire truck to be located at the Ferndale Refinery at a cost of no less than One-Hundred Fifty-Thousand Dollars (\$150,000). COPC will maintain the fire truck, will train its personnel on its use, and will make it available for incidents within COPC's own facilities and also for mutual aid response for facilities and communities within the vicinity of the Ferndale Refinery.
- (b) By no later than December 31, 2005, COPC will enter into a contractual arrangement with the Building Performance Center of the Whatcom County Opportunity Council/Skagit County Housing Authority so as to provide for the replacement of approximately forty (40) old, fireplaces/wood stoves with new, clean-burning fireplaces or certified wood stoves. The stoves will be provided free of charge to low-income households that could otherwise not afford the units. By no later than December 31, 2006, COPC will have spent One-Hundred, Twenty-Five Thousand Dollars (\$125,000) on this project, and the number of wood stoves replaced will be adjusted upward or downward, as appropriate, so as to limit to \$125,000 the amount that COPC will be required to spend.
- (c) By no later than December 31, 2005, COPC will enter into a contractual arrangement with the International Council for Local Environmental Initiatives so as to provide for the development of baseline emissions inventories and emissions reductions targets for participating cities, towns, and counties within NWCAA's jurisdiction for the purpose of developing local action plans to save energy and reduce emissions. The project will result in an evaluation of quantifiable emission reductions and a projection of future emission reductions. By no later than December 31, 2006, COPC will have spent One-Hundred, Twenty-Five Thousand Dollars (\$125,000) on this

project, and the number of participating municipalities/counties will be calculated so as to limit to \$125,000 the amount that COPC will be required to spend.

(d) If COPC fails to comply with the June 30, 2007 deadline in paragraph 79(a) of this First Amendment, then COPC shall pay an additional \$500.00 per day for each day of delay to the Building Performance Center of the Whatcom County Opportunity Council/Skagit County Housing Authority so as to provide for the replacement of old, fireplaces/wood stoves with new, clean-burning fireplaces or certified wood stoves. Payment(s) shall be made not later thirty (30) days following the last day of any month in which the deadline(s) was/were missed.

* * * *

279. Beginning with the first full calendar quarter after the Date of Entry of the Consent Decree, COPC will submit to EPA and the Applicable Co-Plaintiffs within thirty (30) days after the end of each calendar quarter through 2005, and semi-annually on January 31 and July 31 thereafter until termination of this Consent Decree a progress report for each of the Covered Refineries. Each report will contain, for the relevant Covered Refinery, the following:

- (a) progress report on the implementation of the requirements of Section V (Affirmative Relief/Environmental Projects) at the relevant Covered Refinery;
- (b) a summary of the emissions data and Hydrocarbon Flaring Incidents for the relevant Covered Refinery that is specifically required by the reporting requirements of Section V of this Consent Decree for the period covered by the report;
- (c) a description of any problems anticipated with respect to meeting the requirements of Section V of this Consent Decree at the relevant Covered Refinery;

- (d) a description of the status of all SEPs/BEPs (if any) being conducted at the Covered Refinery;
- (e) any such additional matters as COPC believes should be brought to the attention of EPA and the Applicable Co-Plaintiff.

279A. In the semi-annual report required to be submitted on July 31 of each year for each Covered Refinery, COPC will provide a summary of annual emissions data for the prior calendar year to include:

- (a) NOx emissions in tons per year for each heater and boiler greater than 40 mmBTU/hr maximum fired duty;
- (b) NOx emission in tons per year as a sum for all heaters and boilers less than 40 mmBTU/hr maximum fired duty;
- (c) SO₂, CO and PM emissions in tons per year as a sum for all heaters and boilers;
- (d) NOx, SO₂, CO and PM emissions in tons per year for each FCCU;
- (e) SO₂ emissions in tons per year from all Sulfur Recovery Plants;
- (f) SO₂ emissions in tons per year from all acid gas flaring and tail gas incidents;
- (g) NOx, SO₂, PM and CO emissions in tons per year as a sum at each Covered Refinery for all other emissions units for which emissions information is required to be included in the Covered Refinery's annual emissions summaries and are not identified above; and
- (h) for each of the estimates in (a) through (d) above, the basis for the emissions estimate or calculation (i.e., stack tests, CEMS, emission factor, etc.).
- (i) NOx emissions in tons per year for each heater and boiler greater than 40 mmBTU/hr maximum fired duty;

To the extent that the required emissions summary data is available in other reports generated by COPC, such other reports can be attached, or the appropriate information can be extracted from such other reports and attached to the semi-annual report to satisfy the requirement. Any time during the

life of the Decree, COPC may submit a request to EPA to terminate the requirements of this Paragraph 279A, and if EPA approves, COPC shall no longer be required to provide this additional information.

279B. In each semi-annual report for each Covered Refinery, COPC will provide a summary of all exceedances of emission limits required or established by this Consent Decree, which will include:

- (a) for operating units monitored with CEMS or PEMS, for each CEMS or PEMS:
 - (i) total period where the emissions limit was exceeded, if applicable, expressed as a percentage of operating time for each calendar quarter;
 - (ii) where the operating unit has exceeded the emissions limit more than 1% of the total time of the calendar quarter, identification of each averaging period that exceeded the limit by time and date, the actual emissions of that averaging period (in the units of the limit) and any identified cause for the exceedance (including startup, shutdown, maintenance or malfunction), and, if it was a malfunction, an explanation and any corrective actions taken;
 - (iii) total downtime of the CEMS or PEMS, if applicable, expressed as a percentage of operating time for the calendar quarter;
 - (iv) where the CEMS or PEMS downtime is greater than 5% of the total time in a calendar quarter for a unit, identify the periods of downtime by time and date, and any identified cause of the downtime (including maintenance or malfunction), and, if it was a malfunction, an explanation and any corrective action taken.
 - (v) if a report filed pursuant to another applicable legal requirement contains all of the information required by this Subparagraph 279B(a) in similar or same format, the requirements of this Subparagraph 279B(a) may be satisfied by attaching a copy of such report.
- (b) for operating units monitored through stack testing:
 - (i) a summary of the results of the stack test in which the exceedance occurred;
 - (ii) a copy of the full stack test report in which the exceedance occurred;
 - (iii) to the extent that COPC has already submitted the stack test results, COPC need not resubmit them, but may instead reference the submission in the report (e.g., date, addressee, reason for submission).

279C. Each semi-annual report submitted pursuant to this Section IX will be certified by either the person responsible for environmental management at the appropriate Covered Refinery or by a person responsible for overseeing implementation of this Decree across COPC as follows:

I certify under penalty of law that this information was prepared under my direction or supervision by personnel qualified to properly gather and evaluate the information submitted. Based on my directions and after reasonable inquiry of the person(s) directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

* * * *

- 395. (a) Informal negotiations will cease upon either: (i) COPC's submission of a request to the United States and the Applicable Co-Plaintiff of a written summary of its/their position regarding the dispute; or (ii) the United States' and/or the Applicable Co-Plaintiff's submission to COPC of a written summary of its/their position.
- (b) Under the circumstances of Subparagraph 395(a)(i), if the United States and/or the Applicable Co-Plaintiff respond to COPC's request within sixty (60) days of receipt, then the position advanced by the United States and/or the Applicable Co-Plaintiff, as applicable, will be considered binding unless, within sixty (60) calendar days of COPC's receipt of the written summary, COPC files with the Court a petition which describes the nature of the dispute. The United States or the Applicable Co-Plaintiff will respond to the petition within sixty (60) days of filing. Except as noted herein, in resolving a dispute between the parties under these circumstances, the position of the United States and the Applicable Co-Plaintiff will be upheld if supported by substantial evidence in the administrative record, which may be supplemented for good cause shown. If the dispute involves the establishment of the optimized SO₂ Reducing Catalyst Additive addition rate for Sweeny FCCU

- 27 pursuant to Paragraph 64(c) and/or the establishment of the final concentration-based SO₂ emissions limits and averaging times for Sweeny FCCU 27 pursuant to Paragraph 70, the position of EPA will be upheld unless it is arbitrary and capricious.
- (c) Under the circumstances of Subparagraph 395(a)(i), if the United States and/or the Applicable Co-Plaintiff do not respond to COPC's request for a written summary within sixty (60) days of receipt, then COPC will file with the Court a petition which describes the nature of the dispute within one-hundred five (105) days after submitting the initial request to the United States and the Applicable Co-Plaintiff. Applicable principles of law will govern the resolution of the dispute.
- (d) Under the circumstances of Subparagraph 395(a)(ii), the position advanced by the United States and/or the Applicable Co-Plaintiff, as applicable, will be considered binding unless, within sixty (60) calendar days of COPC's receipt of the written summary, COPC files with the Court a petition which describes the nature of the dispute. The United States or the Applicable Co-Plaintiff will respond to the petition within sixty (60) days of filing. Except as noted herein, in resolving a dispute between the parties under these circumstances, the position of the United States and the Applicable Co-Plaintiff will be upheld if supported by substantial evidence in the administrative record, which may be supplemented for good cause shown. If the dispute involves the establishment of the optimized SO₂ Reducing Catalyst Additive addition rate for Sweeny FCCU 27 pursuant to Paragraph 64(c) and/or the establishment of the final concentration-based SO₂ emissions limits and averaging times for Sweeny FCCU 27 pursuant to Paragraph 70, the position of EPA will be upheld unless it is arbitrary and capricious.

* * * *

Parties will be deemed submitted on the date they are postmarked and sent by U.S. Mail, postage prepaid, except for notices under Section XIV (Force Majeure) and Section XV (Retention Jurisdiction/Dispute Resolution) which will be sent either by overnight mail or by certified or registered mail, return receipt requested. Each report, study, notification or other communication of COPC will be submitted as specified in this Consent Decree, with copies to EPA Headquarters, the applicable EPA Region, and the Applicable Co-Plaintiff. If the date for submission of a report, study, notification or other communication falls on a Saturday, Sunday or legal holiday, the report, study, notification or other communication will be deemed timely if it is submitted the next business day. Except as otherwise provided herein, all reports, notifications, certifications, or other communications required or allowed under this Consent Decree to be submitted or delivered to the United States, EPA, the Co-Plaintiffs, and COPC will be addressed as follows:

As to the United States:

Chief
Environmental Enforcement Section
Environment and Natural Resources Division
U.S. Department of Justice
P.O. Box 7611, Ben Franklin Station
Washington, DC 20044-7611
Reference Case No. 90-5-2-1-06722/1

As to EPA:

Director, Air Enforcement Division Office of Civil Enforcement U.S. Environmental Protection Agency Mail Code 2242-A 1200 Pennsylvania Avenue, N.W. Washington, DC 20460-0001 with a hard copy to Director, Air Enforcement Division Office of Civil Enforcement c/o Matrix New World Engineering Inc. 120 Eagle Rock Ave., Suite 207 East Hanover, NJ 07936-3159

and an electronic copy to csullivan@matrixnewworld.com foley.patrick@epa.gov

EPA Regions:

Region 2: Chief Air Compliance Branch US EPA Region 2 Ted Weiss Federal Building 290 Broadway, 21st Floor New York, New York 10007-1866

Region 3:

Chief Air Enforcement Branch (3AP12) EPA Region III 1650 Arch Street Philadelphia, PA, 19103

Region 5:

Air and Radiation Division U.S. EPA, Region 5 77 West Jackson Blvd. (AE-17J) Chicago, IL 60604 Attn: Compliance Tracker

and

Office of Regional Counsel U.S. EPA, Region 5 77 West Jackson Blvd. (C-14J) Chicago, IL 60604

Region 6:

Chief

Air, Toxics, and Inspections Coordination Branch Environmental Protection Agency, Region 6 1445 Ross Avenue Dallas, Texas 75202-2733

Region 9:

Director
Air Division
Mail Code AIR-1
USEPA Region 9
75 Hawthorne Street
San Francisco, CA 94105

Region 10:

Director, Office of Compliance and Enforcement U.S. Environmental Protection Agency, Region 10 Mail Code: OCE-164 1200 Sixth Avenue Seattle, WA 98101

As to Co-Plaintiffs:

As to Co-Plaintiff the State of Illinois

Maureen Wozniak Assistant Counsel Illinois Environmental Protection Agency 1021 North Grand Avenue East P.O. Box 19276 Springfield, IL 62794-9276

and

Manager Compliance and Enforcement Section Illinois Environmental Protection Agency 1021 North Grand Avenue East P.O. Box 19276 Springfield, IL 62794-9276

As to Co-Plaintiff the State of Louisiana, through the Department of Environmental Quality:

Peggy M. Hatch Administrator, Enforcement Division Office of Environmental Compliance Louisiana Department of Environmental Quality P.O. Box 4312 Baton Rouge, Louisiana 70821-4312

As to Co-Plaintiff the State of New Jersey:

Administrator, Air Compliance & Enforcement New Jersey Department of Environmental Protection Post Office Box 422 401 East State Street Trenton, New Jersey 08625-0422

and

Manager, Central Air Compliance & Enforcement Office New Jersey Department of Environmental Protection Horizon Center, P.O. Box 407 Robbinsville, New Jersey 08625-0407

and

Deputy Attorney General, Section Chief Environmental Enforcement Division of Law P.O. Box 093 25 Market Street Trenton, New Jersey 08625-0093

As to Co-Plaintiff the Commonwealth of Pennsylvania

Regional Manager, Air Quality Pennsylvania Department of Environmental Protection 2 East Main St. Norristown, PA 19401

As to Co-Plaintiff the Northwest Clean Air Agency

Director Northwest Clean Air Agency 1600 South Second St. Mount Vernon, WA 98273-5202

As to COPC:

Cully Farhar, Program Manager ConocoPhillips Company 600 North Dairy Ashford Room TA3134 Houston, TX 77079 Telephone: (281) 293-4152

Thomas J. Myers, HSE Manager, U.S. Refining ConocoPhillips Company 600 North Dairy Ashford Room TA3138 Houston, TX 77079 Telephone: (281) 293-4851

Managing Counsel, North American Refining, Transportation & Regulatory Legal Group Legal Department ConocoPhillips Company 600 North Dairy Ashford Houston, TX 77079

With a copy to each Applicable Refinery as shown below:

As to Alliance:

Refinery Manager ConocoPhillips Company Alliance Refinery P.O. Box 176 Belle Chasse, LA 70037

As to Bayway:

Refinery Manager ConocoPhillips Company Bayway Refinery 1400 Park Avenue Linden, NJ 07036

As to Borger:

Refinery Manager ConocoPhillips Company Borger Refinery P. O. Box 271 Borger TX 79008

As to Ferndale:

Refinery Manager ConocoPhillips Company Ferndale Refinery PO Box 8 Ferndale, WA 98248

As to the Los Angeles Carson and/or Los Angeles Wilmington Refineries:

Refinery Manager ConocoPhillips Company Los Angeles Refinery (Carson and Wilmington) 1660 W. Anaheim St. Wilmington, CA 90744

As to the Rodeo and Santa Maria Refineries:

Refinery Manager ConocoPhillips Company San Francisco Refinery 1380 San Pablo Ave. Rodeo, CA 94572 As to the Santa Maria Refinery:

Plant Manager ConocoPhillips Company Santa Maria Refinery 2555 Willow Road Arroyo Grande, CA 93420

As to the Sweeny Refinery:

Refinery Manager ConocoPhillips Company Sweeny Refinery P.O. Box 866 Sweeny, TX 77480

As to the Trainer Refinery:

Refinery Manager ConocoPhillips Company Trainer Refinery 4101 Post Road Trainer, PA 19061

As to the Wood River Refinery (including Distilling West)

Refinery Manager ConocoPhillips Company Wood River Refinery P.O. Box 76 Roxana, IL 62084

Any party may change either the notice recipient or the address for providing notices to it by serving all other parties with a notice setting forth such new notice recipient or address. In addition, the nature and frequency of reports required by the Consent Decree may be modified by mutual consent of the Parties. The consent of the United States to such modification must be in the form of a written notification from EPA, but need not be filed with the Court to be effective.

IT IS SO ORDERED.

Dated this	day of	, 2007.

UNITED STATES DISTRICT JUDGE

FOR THE UNITED STATES OF AMERICA

Date	SUE ELLEN WOOLDRIDGE
	Assistant Attorney General
	Environment and Natural Resources Division
	U.S. Department of Justice
	Washington, D.C. 20530
Date	ANNETTE M. LANG
	Trial Attorney
	Environmental Enforcement Section
	Environment and Natural Resources Division
	U.S. Department of Justice
	P.O. Box 7611
	Ben Franklin Station
	Washington, D.C. 20044-7611
	Telephone: (202) 514-4213
	Facsimile: (202) 616-6584
	DONALD J. DeGABRIELLE, JR.
	United States Attorney
	Southern District of Texas
Date	KEVIN C. AIMAN
	Assistant United States Attorney
	Federal Bar No. 30329
	Texas Bar No. 00797884
	919 Milam, Suite 1500

P.O. Box 61129 Houston, TX 77208

Telephone: (713) 567-9516 Facsimile: (713) 718-3407

FOR THE ENVIRONMENTAL PROTECTION AGENCY

 $\frac{11/13/06}{\text{Date}}$

WALKER B. SMITH

Director
Office of Civil Enforcement
Office of Enforcement and Compliance Assurance
United States Environmental Protection Agency
Ariel Rios Building
1200 Pennsylvania Ave., Mail Code 2201A
Washington, DC 20460

FOR CO-PLAINTIFF THE PEOPLE OF THE STATE OF ILLINOIS

LISA M. MADIGAN Attorney General State of Illinois

MATTHEW J. DUNN, Chief Environmental Enforcement/Asbestos Litigation Division

///4/06 Date

BY:

THOMAS DAVIS, Chief Environmental Bureau Assistant Attorney General 500 S. Second St. Springfield, IL 62706 (217) 782-9031

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

11 10 04 Date

BY:

Robert A. Messina V
Chief Legal Counsel
Illinois Environmental Protection Agency
1021 North Grand Avenue East
P.O. Box 19276
Springfield, IL 62794-9276
(217) 782-5544

PRELIMINARY APPROVAL BY CO-PLAINTIFF, THE STATE OF LOUISIANA, THROUGH THE DEPARTMENT OF ENVIRONMENTAL QUALITY:

11-6-06 Date

1-6-06

Against Same

Assistant Secretary
Office of Environmental Compliance
Louisiana Department of Environmental
Quality

TED R. BROYLES, II
Trial Attorney
(La. Bar Roll #20456)
Legal Affairs Division
Louisiana Department of Environmental
Quality
P.O. Box 4302
Baton Rouge, Louisiana 70821-4302
(225) 219-3985

FOR CO-PLAINTIFF STATE OF NEW JERSEY

STUART RABNER ATTORNEY GENERAL OF NEW JERSEY

November 29, 2006

By:

SCOTT B. DUBIN
Deputy Attorney General
New Jersey Department of Law and Public Safety
Division of Law
RJ Hughes Justice Complex
25 Market Street
P.O. Box 093
Trenton, NJ 08625-0093
(609) 984-7141

LISA P. JACKSON
COMMISSIONER
NEW JERSEY DEPARTMENT OF
ENVIRONMENTAL PROTECTION
401 East State Street
P.O. Box 402
Trenton, NJ 08625-0402

Nov. 27, 2007 Date

By:

Assistant Commissioner
Compliance and Enforcement
401 East State Street
P.O. Box 422
Trenton, NJ 08625

FOR CO-PLAINTIFF COMMONWEALTH OF PENNSYLVANIA

11/7/06 Date

FKANCINE CARLINI
Regional Manager, Air Quality
Pennsylvania Department of Environmental
Protection
2 East Main Street
Norristown, PA 19401
(484) 250-5920

FOR CO-PLAINTIFF NORTHWEST CLEAN AIR AGENCY

11/27/06 Date

LAUGHLAN H. CLARK, WSBA # 10996 Zender Thurston P.S. 1700 D St. P.O. Box 5226 Bellingham, WA 98227 (360) 647-1500

FOR CONOCOPHILLIPS COMPANY

//	 /	3	_	OC
//	 /	3	_	06

Date

Oth L.M. ZIEMBA
President, U.S. Refining
ConocoPhillips
600 N. Dairy Ashford
Houston, Texas 77079
(281) 293-1000

APPENDIX A

LIST OF FLARING DEVICES AT THE COVERED REFINERIES

Refinery

Name of Flare

Alliance

Low Pressure Flare (coker)

High Pressure Flare

Marine Vapor Recovery Flare – 406 D-15 Marine Vapor Recovery Flare – 406 D-16

Bayway

Poly Flare CLEU Flare ABW Flare Eastside Flare

Borger

East Refinery Flare West Refinery Flare

ARDS Flare Cat Flare

NGL Non-Corrosive Flare NGL Corrosive Flare

Acid Gas Flare Derrick Flare

Ferndale

ZTOF

LAR Carson

LAR Carson East

LAR Carson West

LAR

LAR Wilmington North

Wilmington

LAR Wilmington South

LAR Wilmington Unicracker

LPG Flare

Rodeo

19C-1

19C-602

Santa Maria

Flare

Sweeny

Unit 7 Flare

Units 11/14 Flare Units 15/17/19 Flare Expansion LP Flare Expansion HP Flare

Unit 5 Flare
Unit 30 Flare
VDU/DCU Flare
DEA Stripper Flare
SW Stripper Flare

Trainer

Main Yard Flare Old Yard Flare Acid Gas Flare SWS Gas Flare

Wood River

Alkylation Flare Aromatics North Flare Aromatics South Flare Distilling West Flare

North Property Ground Flare

Lube (HCNHT) Flare

Distilling Flare

Benzene Loading Flare VOC Flare (and Spare)